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An Urban Heat Service for London: Workshop Summary

At the end of June 2021, the Met Office (MO) hosted a virtual workshop in collaboration with the London Climate Change Partnership to bring together stakeholders within London to understand user requirements for an urban heat service for the city. Representatives from several London Boroughs, transport, health and third sector organisations, academia and the Greater London Authority (GLA) were invited to share their views. Participants were split into breakout rooms and shown slides with several questions on each of the topics below to prompt discussion. This document summarises these discussions.

Heat Impacts for London

- Vulnerable most at risk older people, the very young, pre-existing health conditions, those affected by social inequality.
- Functioning of the city impacts on rail network for commuting, Tower Bridge mechanisms overheat.
- **Built up areas of the city** with little green space most affected.
- New buildings are not always designed to manage heat.
- Safety of staff working outdoors.

Current Information and Decision Making

Current Information: To prepare for heatwave events, many organisations use the MO and Public Health England's (PHE) heathealth watch service along with PHE's Heatwave Plan for England. MO forecasts are used for planning maintenance schedules for transport. Guidance is also sought from the London Resilience Forum. UK Climate Projections and the GLA's heat risk map have been used for long term resilience planning. There are many activities taking place within London to look at the longer-term impacts of heat. For example, London Borough of Harrow are reviewing their heatwave and drought plans, TfL have several projects underway to manage passenger discomfort and the GLA have published the London Environment Strategy. Some organisations are planning how to communicate with the public to raise awareness of the impacts of heat on health. From an engineering and design perspective, consultants are looking at how to make designs fit for the future.

Information Gaps:

- Policy gaps in building standards for heat
- Understanding current risk and opportunities for action
- Standards and context for new datasets including methodology, setting best practice and guidance.

Several boroughs are starting to assess exposure and vulnerability to climate hazards. It was recognised that many policies exist for managing cold events but less for heat.

Decision Making: There was discussion on roles and responsibilities - Local Authorities have responsibility for warning and informing communities while GLA work strategically with PHE and MO. PHE and MO work closely to determine what alerts may be needed and to activate the Heatwave Plan as well as informing the MO's new extreme heat warning. There are also strong networks between the boroughs, NHS partners and British Red Cross for community engagement and emergency response and planning.

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Future Information Requirements

There were several requirements for future information on heat in cities summarised by the following themes:

Messaging: A joined up approach to messaging is required to make sure everyone is on the same page as well as advice on what to do during a heatwave event, e.g. nearest greenspace, mapping of cool spaces was seen as useful.

Mapping: High resolution, sub regional maps would be useful, particularly for planning if they are linked to a strategic policy that requires planning applicants to incorporate in their design process. Future vulnerability risk mapping would be useful to complement the GLA risk maps that focus on current risk. **Scale:** Information at a city-wide scale may be sufficient but there were also calls for more localised, borough and neighbourhood level information.

Sector Information: For the built environment information should align with building standards and be robust to account for long design lives (50-100 years) of structures. Information on how diurnal temperature cycle may change and seasonal variability is required for building designs. Information is required on current risk to manage existing buildings that are overheating now. In terms of transport, climate information is required for reviewing resilience plans.

Heat Pack Feedback:

Several potential uses for the Heat Pack were identified such as warning and informing schools and social care settings, raising awareness and supporting policy making within the built environment sector, and developing a shared understanding within and between organisations in London on current and future heat risks.

"[The Heat Pack] could support policy making...to make requirements in planning applications"

There was also some constructive feedback on how to refine the Heat Packs further such as providing graphical information on how different weather events are impacted by the urban heat island, providing more information on emission scenario uncertainty and technical information on how the urban environment is represented within the model. To enhance uptake of the service it was recommended to obtain sign off from organisations such as GLA, PHE, LCCP and Resilience Forums, and provide an extra page with links on where people can access more local information for their ward or borough.

Next Steps

Follow up discussions will be held with those interested in working more closely with the Met Office to co-design and co-produce an urban heat service for London.

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Aug & Sopt	1 Heat Pack Fier 2 of the heat service h users to inform development of Tig	er 1 & 2 service		
•Delivery of protype T 2021	Fier 1 Heat Pack and Tier 2 urban hea	at service		

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